



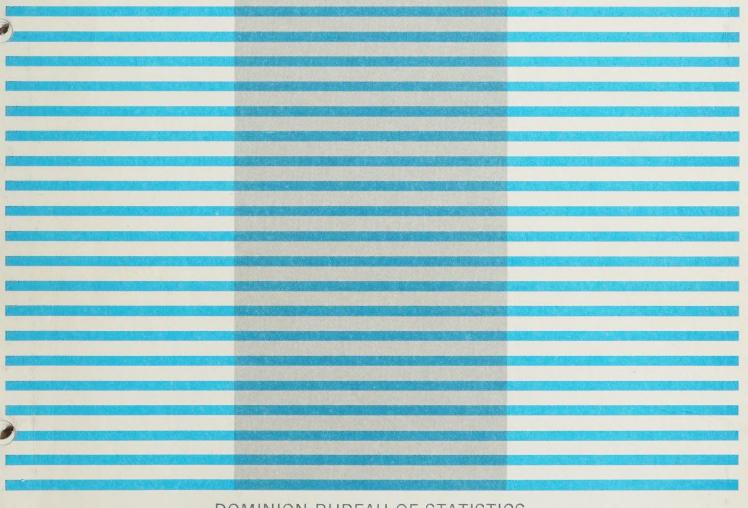
CATALOGUE No. 12-530 OCCASIONAL

Government Publications

# CANSIM: operation manual for data entry

Canada estatistica Canada.







# DOMINION BUREAU OF STATISTICS General Time Series Staff

### CANSIM: OPERATION MANUAL FOR DATA ENTRY

Published by Authority of
The Minister of Industry, Trade and Commerce

[ Amended to ]

February 1971 2700-**504** 

Price: \$1.00



#### **PROLOGUE**

This manual describes part of a system which had its inception in a data storage, retrieval and manipulation computer package developed by M.C. McCracken. This prototype system was developed in 1964 at Southern Methodist University, where there was a need to collect and manipulate time series data to estimate parameters for an econometric model. The first version used card images stored on magnetic tape and a small retrieval program which simply reformatted the data for input to statistical utility programs. In January 1965 the development of a more advanced system was started and a working version of the new system was in use by April of 1965.

The Economic Council of Canada provided funds for the development of an expanded system on a CDC 3400 computer at the University of Montreal. This expanded version has been in use, with modifications, since September 1965. In May 1966 the Bank of Canada became the first agency other than the Council to make use of the system and during the summer and fall of 1966 the National Energy Board and the Department of Finance began using the system for maintenance and manipulation of the data necessary in their own analytical operations.

In November of 1966 the Dominion Bureau of Statistics accepted the responsibility for the entry of data into the base and maintenance of the existing programs. The Economic Council and the Bank of Canada expressed the hope that the system would eventually be modified into a true information system for use in the operations of statistical agencies of the Canadian Government.

As a result, in July 1967, an inter-departmental team was set up under the direction of Dr. T.J. Vander Noot to implement a national data base for socio-economic data. This manual comprises one volume of the documentation for this system. Amendments to the manual will be issued from time to time and are included in the price.

### TABLE OF CONTENTS

Se	ction	n	Page
	1	Introduction	4
	2	Procedures for Initiating Action Requests	5
	3.1	Card Formats	6
	3.2	Operation Codes	7
	3.3	Add Matrix (AM)	8
	3,4	Change Matrix (CM)	9
	3.5	Add Series (AS)	12
	3.6	Change Series (CS)	14
	3.7	Enter Data (ED)	15
	3.8	Terminate and Delete Series (TS and DS)	17
	3,9	Delete Matrix (DM)	18
	4	Sample Forms for Submission to Keypunch	19
	5	Successful Action Requests	40
	6	Error Messages	49
	7	Data Mask Type Codes.	50
	8	Report Frequency and Reference Dates	51
	9	Deck Structure	52
	10	Glossary	53

Digitized by the Internet Archive in 2023 with funding from University of Toronto

#### INTRODUCTION

CANSIM (Canadian Socio-Economic Information Management System) is designed for the efficient and economic management of a large volume of time series data. The programs for data storage, retrieval and manipulation comprising the system were written for the IBM-360 Model 65. Management, control and maintenance of the system are the responsibility of the Dominion Bureau of Statistics. Accuracy of the included data is the responsibility of the agency compiling it.

Operation of the programs will be supervised by Data Bank Control, in the Operations Unit of the Current Business Indicators and Time Series Data Bank (TSDB) Section of the Dominion Bureau of Statistics.

The subject of this operational manual is the data entry sub-system which provides for entry, update andrevision of the data. A companion manual entitled CANSIM: Users' Manual for Data Retrieval and Manipulation is also available. The following sections attempt to cover all points which might give rise to difficulties, and to warn where danger of error is greatest.

The data base will expand to include large numbers of time series originating in DBS and elsewhere. New entries, updates and revisions will flow directly from the data source to Data Bank Control for action. As the output of DBS becomes increasingly computorized, data-capture routines will provide for entry to the data base of updates and revisions directly from tapes or cards created as part of the data processing operations. In the meantime, however, action requests will be prepared

manually by the responsible agency and section or, in the case of a relatively small number of series, by TSDB staff.

Eight action requests, listed in Section 2.2, are used to enter data into the data base together with titles, notes, footnotes and all other information required to identify, print out, and safeguard the data, to change any item of information, and to enter data points into the base as projections, estimates, current data or revisions. For each action request, a form has been designed which simplifies the entry of information for keypunching. The inclusion of card numbers assists in assembling the card deck for submission to the computer and helps ensure that information provided is complete.

Step-by-step detailed procedure for establishing matrix and series headers and data entry action is outlined in Section 3, sample forms for submission to keypunch in Section 4, and printout of successful action requests in Section 5.

A list of error messages which will be printed out when an error has caused refusal of the requested action is given in Section 6. Error messages don't in every instance cause refusal of the requested action. The error messages should be used in conjunction with printed out results of the action to locate and correct errors. Careful scrutiny of error messages is recommended as a guide in setting up clerical checking routines. Codes identifying the agency and section responsible for accuracy and security of the data are recorded by Data Bank Control.



#### PROCEDURES FOR INITIATING ACTION REQUESTS

Section 4 contains a sample matrix and the various forms used in the data entry program. The sequence of steps to be followed in entering information into the CANSIM system is given below. Printouts for successful actions and example of error messages for refused actions will be found in Sections 5 and 6. Data Bank Control staff will assist and advise users on request.

- A. To enter a matrix into the base requires the following steps:
  - (a) Obtain matrix number and Databank series number from Data Bank Control.
    - (b) Assign Data Entry Security Word to the matrix,
    - (c) Assign series numbers to matrix components in a hierarchical framework, working downwards through successive levels. Refer to Glossary (series number).
    - (d) For series with secured data point(s), assign appropriate security word i.e. series, confidential, or secret.
  - 2. Maintain a register with the following entries:
    - (a) Matrix number
    - (b) Series number
    - (c) Security level(s)
    - (d) Security word(s)
    - (e) Data entry security word
    - (f) Date of entry
    - (g) Name, location, and telephone number of responsible officer.

Data Bank Control provides item (a) and must be supplied with items (b), (c) and (g) only.

- 3. Complete AM, AS, and ED forms and check carefully,
- 4. Keypunch. In addition, verifying is recommended and, for other than small jobs, a listing facilitates checking.
- 5.¹ Forward cards to CANSIM clerk, CDPSB, together with requisition completed in duplicate. On completion of the action request the duplicate copy of the requisition will be returned with cards, listings, time of runs, and results of action request.
- B. 1. For operations on the existing data base or to enter a new series to a matrix existing in the base, select and complete the appropriate forms (CM, AS, ED, CS, DS, TS, DM) for the action desired, and perform steps A 4 and A 5.
- C. Resubmissions to correct errors.
  - Check error messages and printouts to locate and correct errors.

Note: Since only one error is detected at a time, there may be a second refusal and it may be worthwhile at this point to recheck the resubmission.

2. Perform steps A 4 and A 5.

<sup>&</sup>lt;sup>1</sup> DBS users will submit the completed forms to Data Bank Control. A supply of forms may be obtained from Data Bank Control, telephone number 2-4527. See also DBS Supplementary Instructions.



CANSIM: Operation Manual for Data Entry (Catalogue Number 12-530) Amendment Number 4 October 2, 1969

#### FLOATING-POINT CHARACTERISTICS

The term "Floating-point Characteristic" is being replaced by "Number of Decimal Places", throughout this manual. The term and its associated codes specify the number of digits to the right of the decimal. The following table illustrates the new coding:

Number of Decimals	Code	Example
0	00	100.
1	01	100.1
2	02	100.12
3	03	100.123
4	04	100.1234
5	05	100.12345



#### CARD FORMATS

#### General

In the sample card formats in this section, character means any alphabetic, numeric or machine permissible special symbol.

Where blank columns are permitted in any field, the card format specifies whether the entry is to be right justified or left justified (see definition). To avoid repetition, the card form has been separated into two sections. Entries in the first part can be auto-duplicated for all cards pertaining to the same matrix; in the second part entries will vary from card to card and must be entered.

Left Right
Agency Code
Section Code
Security words
Series number

 $<sup>^{2}\,\</sup>mbox{The following}$  are always left or right justified as indicated:



#### **OPERATION CODES**

There are eight action requests in the data entry program, and each action is explained in sections as follows:

Code	Action request	Section
AM	Add Matrix Header	3.3
CM	Change Matrix Header	3.4
AS	Add Series Header	3.5
CS	Change Series Header	3.6
ED	Enter Data Point into Base	3.7
TS	Terminate Series	3.8
DS	Delete Series	3.8
DM	Delete Matrix	3.9



#### ADD MATRIX, OPERATION CODE (AM)

The ADD MATRIX action request enters the Matrix Header into the base.

The matrix number, system identification and the codes identifying the agency and section responsible for accuracy and security of the data must appear on all cards without exception.

Matrix numbers are assigned by the Data Bank Control and are recorded in a Matrix Number Register. Numbers will be allocated as required for immediate use. Matrices are entered sequentially following the last existing number in the base. Numbers of matrices released by the delete action request may be used for replacement matrices after a period of time has passed.

The matrix long title is entered continuously using up to 6 cards, each of which may contain up to 50 characters of the title. All information necessary to describe the matrix should be included, such as seasonally adjusted and unadjusted, frequency, unit of measure etc.

The matrix short title has a maximum of 40 characters. Where abbreviations are required, care should be taken to achieve the maximum intelligibility.

#### Matrix Note and Footnotes

A matrix may have one matrix note and up to 9 footnotes. The matrix note will normally include reference to publications or other information on sources, definitions, methods, major revisions and their effect on comparability of historical data. In addition, it is useful to include the approximate time lag to publication expressed in number of calender days after the close of the reference period. Although the text of the footnotes are entered in the matrix header, footnotes refer only to data points. A single data point may make reference to a maximum of 4 footnotes, and reference to footnotes is made by the Enter Data (ED) action, Normally a note which refers to a specific series should be made a footnote. A note which refers to several series or to most of the series in the matrix should be included in the matrix note. Users are reminded that a limit of 9 footnotes per matrix can be quickly exhausted. Whenever possible therefore, a note should be included in the matrix note particularly when it applies to most of the series in the matrix. The text of the matrix note is entered continuously, 50 characters per card, up to a maximum of 10 cards (500 characters). The text of each footnote is limited to 120 characters entered continuously on 3 cards.

The identifying number of the footnote to be entered in columns 69-72 of the Enter Data form will be found in the second digit of the card number. For example, the three cards belonging to footnote four are 141, 142, and 143.



#### CHANGE MATRIX, OPERATION CODE (CM)

The CHANGE MATRIX (CM) action request permits the changing of any entry in the matrix header except the matrix number. The card format differs from the ADD MATRIX in only one respect: new agency and section codes may be entered in cols 59-62 and 63-66 to replace the codes existing in the matrix header.

An entry in columns 31-80 of card 001 replaces the corresponding information existing in the matrix header but fields left blank are not altered. To blank Secret Security Word (cols 38-44) or Confidential Security Word (cols 45-51) enter asterisks. Asterisks must not be entered in other fields of card 001.

If changes are to be made in the matrix long title (cards 002-007), matrix note (cards 011-020),

or an individual footnote (1-3 cards), it is strongly recommended that the entire set of cards for that field be redone. For example, to change a matrix long title which presently consists of 6 cards (cards 002-007) to a title of 4 cards, requires cards 006 and 007 with blanks, in addition to cards 002-005. The purpose of including cards 006 and 007 with blanks is to blank what was previously on these cards 006 and 007. To change a title of 4 cards to a title of 4 or more cards requires **no** blank cards.

If changes are to be made to either the short title (card 008) or source (card 009), card 008 or 009 should be resubmitted with the corrected short title or source.

Card Format: ADD MATRIX, Operation Code (AM)

CHANGE MATRIX, Operation Code (CM)

Column number	Contents	Explanation
Auto duplicate		
All cards <sup>1</sup> - Columns 1-27:		
1 - 4	TSDB	System Identification
5 - 8	4 characters maximum, left justified,	Agency responsible for accuracy and security of data.
9 - 12	4 characters maximum, left justified.	Section of Agency responsible.
13 - 19	Code Word	Not required for AM, but mandatory for CM.
20 - 21		Operation code
22 - 27	6 digits, right justified	Matrix number. Enter leading zeros.
Fields varying from card to card		
Card number 1:		
28 - 30	001	Card number
31 - 37	7 characters maximum, left justified.	Data Entry Security Word, mandatory for Add Matrix.
38 - 44	7 characters maximum, 7 as terisks, or blank, left justified.	If any data points are classified secret within this matrix, the secret security word must be assigned, entered, and recorded by data source.

<sup>&</sup>lt;sup>1</sup> There is no card number 10.



### Card Format: Add MATRIX, Operation Code (AM) — Continued Change MATRIX, Operation Code (CM) — Continued

Column number	Contents	Explanation
Fields varying from card to card - Conc.		
Card number 1 - Conc.:		
45 - 51	7 characters maximum, 7 asterisks, or blank, left justified.	If any data points are classified confidential within this matrix, the confidential security word must be assigned, entered, and recorded by data source.
52	1 or 2	Cross-foot requested; 1 = yes 2 = no
53 - 58	6 characters maximum or blank, left justified.	Matrix Coupling (an additional security provision to be added at a later date).
59 - 62	4 characters maximum or blank, left justified.	New Agency Code (for Change Matrix only).
63 - 66	4 characters maximum or blank, left justified.	New Section Code (for Change Matrix only).
67 - 80	Blank	
Matrix titles		
Card numbers 2-7 inclusive:		
28 - 30	002 - 007	Card numbers
31 - 80	50 characters maximum, left justified.	Matrix long title. Enter text continuously through 6 cards to a maximum of 300 characters. (refer to Section 4 for sample)
Card number 8:		
28 - 30	008	Card number
31 - 70	40 characters maximum, left justified.	Matrix short title
Source		
Card number 9:		
28 - 30	009	Card number
31-80	50 characters maximum, left justified.	Source
Matrix note		
Card numbers 11-20 inclusive:		
28 -30	011 - 020	Card numbers
31 - 80	50 characters maximum, left justified.	One matrix note is allowed per matrix. Enter text continuously through 10 cards to a maximum of 500 characters. Refer to Section 4.



## Card Format: Add MATRIX, Operation Code (AM) — Concluded Change MATRIX, Operation Code (CM) — Concluded

Column number	Contents	Explanation
Footnotes		
Card numbers 111-193:		
28	1	1 in column 28 designates a footnote.
29	1 - 9	Footnote number. A matrix may have a maximum of 9 footnotes.
30	1 - 3	Card numbers within each footnote (cols 28-30 are treated as a 3 digit card number.)
31 - 80	50 characters maximum, left justified.	Enter text continuously through 3 cards to a maximum of
31 - 50	20 characters maximum, left justified.	120 characters (refer to Section 4 for sample).



#### ADD SERIES, OPERATION CODE (AS)

The ADD SERIES (AS) action request enters header information relating to a specific series. Data Entry is covered in Section 3.7.

Further information necessary concerning each entry is given in the glossary (Section 10). Tables of mask types and report frequency codes are set out in Sections 7 and 8. Note that leading zeros must be entered for matrix numbers.

#### Card Format: Add Series Operation Code (AS)

Column number	Contents	Explanation
Auto duplicate All cards - Columns 1-27:		
1 - 4	TSDB	System Identification.
5 - 8	4 characters maximum, left justified.	Agency responsible for accuracy and security of data.
9 - 12	4 characters maximum, left justified.	Section of agency responsible.
13 - 19	7 characters maximum, left justified.	Code Word. This is the Data Entry Security Word which was entered in the matrix header and is mandatory to permit access to this matrix.
20 - 21	AS	Operation Code
22 - 27	6 digits, right justified	Matrix number, enter leading zeros.
Fields varying from card to card		
Card number 1:		
28 - 30	001	Card number.
31 - 50	20 digits maximum, left justified.	Series number.
51 - 52	00 to 29	Scalar Factor or Power Factor.
53 - 54	90 to 09 -9 to 12	Floating point characteristic. Number of decimal polaris
55 - 56	00 to 99	Data Mask-Type-code.
57 - 59	001 to 998 or 999	Variance allowed expressed as a per cent as determined by the data source, or 999 = no edit requested.
60 - 66	7 characters maximum, or blank.	Series security word.
67 - 68	2 digits	Report Frequency.
69 - 71	3 digits	Expected time of update. 999 if update can occur at any time.
72 - 79	8 characters maximum. Alphabetic, left justified. Numeric, right justified.	Data Bank series number. The alphabetic is the agency symbol i.e. D for DBS, B for Bank of Canada; and numeric is the identification number.
80	blank	



#### Card Format: Add Series Operation Code (AS) - Concluded

Column number	Contents	Explanation
Fields varying from card to card - Conc.		
Card number 2:		
28 - 30	002	Card number.
31 - 50	20 digits maximum, left justified.	Series number.
51 - 60	10 characters maximum, left justified.	Unit of Measure i.e. dollars, bushels, tons etc.
61 - 80	20 characters maximum, left justified.	Series title (If title longer than 20 characters, continue to card 3).
Card number 3:		
28 - 30	003	Card number.
31 - 50	20 digits maximum, left justified.	Series number.
51 - 80	30 characters maximum, left justified.	Series title.



#### CHANGE SERIES, OPERATION CODE (CS)

This operation may be used to change any entry (except report frequency) which appears in columns 51-80 of cards 1-3 inclusive of the add series format. Entries in columns 1-50 inclusive of card 1 cannot be changed by a change series action. See Change Matrix.

An entry in any field (cols 51-80) of card 001 replaces the corresponding entry in the series header. To blank series security word (cols 60-66) enter asterisks. Asterisks must not be entered in other fields of card 001.

To change Unit of Measure, the new Unit of Measure should be entered in card 002, together with the first part of the series title.

If change is required in the series title, both cards 002 and 003 may be required. For example, to change a title presently on cards 002 and 003 to a title requiring only 1 card, requires card 003 with blanks in columns 51-80 in addition to card 002 containing the new title and the Unit of Measure.



CANSIM: Operation Manual for Data Entry (Catalogue Number 12-530) Amendment Number 2 August 21, 1969

#### CORRECTIONS TO FOOTNOTES (Section 3.7)

This is to clarify the instruction concerning corrections to footnotes.

#### 1. To delete or blank footnote reference

Columns 69-72 must be complete with four asterisks. This applies whether the action is to delete 1, 2, 3, or 4 footnotes. 'C' required in column 74.

#### 2. To change footnote reference

Enter the proper footnote number in columns 69-72.

#### For example:

- (a) to change footnote reference from 1 to 2, enter 2 in column 69 and C in column 74.
- (b) to change footnote reference from 1 and 2, to 1 only, enter 1 in column 69 and C in column 74.
- (c) to change footnote reference from 1
   to 1 and 2, enter 1 in column 69, 2
   in column 70 and C in column 74.



CANSIM: Operation Manual for Data Entry (Catalogue

Number 12-530)

Amendment Number 3 August 22, 1969

# DATA NOT AVAILABLE (Section 3.7)

Whenever data for a particular reference date is not available (ie. due to confidentially or strike), a value "O" must be entered with a footnote "data not available for (reference date)".

This footnote enables users to differentiate between true "O" and not available "O".



# ENTER DATA, OPERATION CODE (ED)

The CANSIM data entry program allows one data point per card. Information in columns 1-27 on this form is common to all data points; therefore, a new form must be used to enter data points for each different matrix number.

The Error Messages in Section 6 indicate the care with which the data entry form must be completed. Particular care is required in deciding the correct data entry code (col 67). There are 5 data entry codes as follows:

Code	Can replace	Can be replaced by codes
1 — Projection into future	Blank field, codes 1 or 5.	1, 2, or 3.
2-Estimate of current figure	Blank field, codes 1 or 5.	3 or 4.
3 - Current figure	Blank field, codes 1, 2, or 5.	4
4-Revision of current figure	Codes 2, 3, 4 or 5. Never a blank field.	4
5 - Initial entry of data	Blank field.	1, 2, 3, or 4

Note: Entry type 3 must be used on updates against a type 2 when data values are the same. Entry type 4 must be used on updates against a type 2 when data values are different.

# Card Format: Enter Data, Operation Code (ED)

Column number	Contents	Explanation
Auto duplicate		
All cards — Columns 1-27:		
1 - 4	TSDB	System Identification.
5 - 8	4 characters maximum, left justified.	Agency responsible for accuracy and security of data.
9 - 12	4 characters maximum, left justified.	Section of Agency responsible.
13 - 19	7 characters maximum, left justified.	Code Word. This is the Data Entry Security Word which was entered in the matrix header and is mandatory to permit access to this matrix.
20 - 21	ED	Operation Code.
22 - 27	6 digits maximum, right justified.	Matrix Number.



# Card Format: Enter Data, Operation Code (ED) — Concluded

Column number	Contents	Explanation
Field varying from card to card		
28 - 30	001 - 999	Card numbers.
31-50	20 digits maximum, left justified.	Series number.
51-56	6 digits	Reference Date (yr. mo. dy)i.e.Feb.12,1968 = 68 02 12.
57 - 66	10 digits maximum, right justified.	Data. Do not enter decimals or leading zeros. Whenever data for a particular reference date is not available (for example, because of confidentiality or a strike), a zero value must be entered with a footnote "data not available for (reference date)". This footnote enables users to differentiate between true "0" and not available "0".
67	1, 2, 3, 4, or 5	Data Entry Code.
68	1, 2, 3, or blank	Security level of this data point. Ensure that the corresponding security word has been entered in the matrix header or the series header.
69 - 72	4 digits maximum or blank, left justified.	A data point may make reference to four footnotes. Enter here the specific footnotes in the matrix header which refer to this data point.
73	9 or blank	Blank—Checks that the per cent change from the last period in the base falls within the variance-allowed entered in the series header.
		9-Override i.e. no variance-allowed check is made.
74	C, D, or blank	C-To correct an erroneous entry made for data points, entry type, security, or footnotes. If the field is left blank, that field will not be changed. In order to blank security enter an asterisk in column 68; to blank footnotes enter four asterisks in columns 69-72. To change footnote references enter in columns 69-72 all the footnote numbers which apply to the data point regardless of whether they appeared before the correction.
		D-To delete the entire "data point slot". Columns 1-56 must be complete and identical to that which is presently on base. To change reference date, first delete the data point slot and resubmit data with proper reference date. "D" required in column 74.
		Blank-Normal data action (any of the 5 data entry codes.) Columns 1-67 must be complete. In addition column 68 if data is secure and columns 69-72 if reference to footnotes required.
75 80	Blank	



# TERMINATE SERIES, OPERATION CODE (TS), AND DELETE SERIES, OPERATION CODE (DS)

These action requests require the signature of the authorized requesting officer. Within DBS, requests without proper signature will not be accepted by Data Bank Control. Government users submitting work directly to the Central Data Processing Service Bureau should ensure that action requests to terminate or delete series are similarly controlled.

TERMINATE SERIES results in a closed-file. Further action requests to enter data will be refused. A series terminated in error may be deleted and re-

entered into the base. Data may be retrieved from a terminated series.

DELETE SERIES removes the series from the base. For safety, the delete series action ends with a card-out routine. Thus a series deleted in error may be immediately re-entered into the base.

The card format for the two action requests TS and DS differ only in operation code entered in columns 20 - 21.

# Card Format: Terminate/Delete Series

Column number	Contents	Explanation
	TSDB 4 characters maximum, left	System Identification.  Agency Code.
9-12	justified.  4 characters maximum, left justified.	Section Code.
13 - 19	7 characters maximum, left justified.	Code Word (Data Entry Security Word).
20 - 21	TS or DS	Operation Code.
22 - 27	6 digits, right justified	Matrix number. Enter leading zeros.
31 - 50	20 digits maximum, left justified.	Series number.



# DELETE MATRIX, OPERATION CODE (DM)

This action request requires the signature of the authorized requesting officer. Within DBS, requests without proper signature will not be accepted by Data Bank Control. Government users submitting work directly to Central Data Processing Service Bureau should ensure that action requests to delete matrix are similarly controlled.

The DELETE MATRIX (DM) action removes the matrix from the base. The matrix number thus released

can be used in a subsequent ADD MATRIX action. However, to minimize the chance of "dialing the wrong number" the matrix number will not be reissued immediately. For safety, the DELETE MATRIX operation ends with a card-out routine; thus if a matrix is deleted in error, it can be immediately re-entered into the base. This command is inoperative if the series contained in the matrix have not already been deleted.

#### Card Format: Delete Matrix (DM)

Column number	Contents	Explanation
1 - 4	TSDB	System Identification.
5 - 8	4 characters maximum, left justified.	Agency Code.
9-12	4 characters maximum, left justified.	Section Code.
13 - 19	7 characters maximum, left justified.	Code Word (Data Entry Security Word).
20 - 21	DM	Operation Code.
22 - 27	6 digits, right justified	Matrix number, enter leading zeros.



#### SAMPLE FORMS FOR SUBMISSION TO KEY PUNCH

This section contains a set of completed forms used for the eight action requests of the data entry program,

- 1. Add Matrix (AM)
- 2. Change Matrix (CM)
- 3. Add Series (AS)
- 4. Change Series (CS)
- 5. Data Entry (ED)
- 6. Delete Series (DS)
- 7. Terminate Series (TS)
- 8. Delete Matrix (DM)

All cards in any action request operating on a matrix always have information in columns 1-27 auto-duplicated. In any action request operating on a series, all cards will have information in columns 1-27 and 31-50 auto-duplicated.

Entries which are always left-justified are: Agency, Section, Series number, Data Entry Security Word, other security words, titles, source, and notes. The matrix number will always be right justified and will have leading zeros entered. The data will be right justified. Signed numbers will have the sign entered in the left hand column immediately preceding the first digit.

#### Add or Change Matrix Action Requests

Note that columns 59-66 are used only in the CHANGE MATRIX operation. In this action they may be used to replace the agency and section codes in the base (the codes existing in the base must, of course, appear in columns 5-8 and 9-12).

The matrix long title (300 characters), matrix note (500 characters), and footnotes (120 characters each) are entered continuously without hyphens for words which would extend beyond column 80.

#### **Delete and Terminate Action Requests**

To be executed a DELETE MATRIX, DELETE SERIES, or TERMINATE SERIES form must bear the signature of the authorized requesting officer in the agency responsible for the data. As a safety measure the final step in delete series or matrix actions is a card-out routine which provides for immediate re-entry in case of error. A card-out routine is time-consuming and costly: the authorized officers are requested to consider requests carefully before initiating the delete series or matrix actions. Note that all series within a matrix must be deleted prior to deleting the matrix.

### Add Matrix (pages 21 and 22)

This establishes matrix 000007 on the CANSIM base. Note that Data Entry Security Word (cols 31-37) is mandatory for this operation. This word becomes the Code Word, and any future action requests to add or make changes to this matrix, or changes to series within this matrix, requires this

code word. Because of secure data, "secret" and "confidential" security words are entered. Three footnotes are also entered.

#### Add Series (pages 23 to 32)

A separate Add Series form is required for each series to be added. Here we are adding the following series to matrix 000007: 1, 1.1, 1.1.1, 1.1.2, 1.1.3, 1.1.4, 1.1.5, 1.1.6, 1.1.7, and 1.1.8. Note that in every case the Code Word is mandatory in columns (13-19), which is the Data Entry Security Word established in the matrix header. Series 1.1.2 has series security word.

#### Data Entry (page 33)

Cards 001-006.—These are normal data entry actions to add current data for reference date 680101. Note that column 74 is blank, and entry type (column 67) must satisfy requirements outlined in section 3.7. Series 1.1.4 and 1.1.6 has 9 in column 73 (variance—allowed check will not be made).

Card 007.—This operation deletes the "data point slot" for reference date 671010. (date should be 671001), Note D in column 74.

 ${\bf Card~008.-This~operation~establishes~the~data}$  deleted by card 007 with the correct reference date 671001. Note that column 74 is blank.

Card 909.—Normal data entry action to add current data for reference date 680101. 9 in column 73 (variance—allowed check will not be made).

 $Card\ 010.-$  Normal data entry action to revise a current figure for reference date 670701. Note 4 in column 67 and 9 in column 73. Although there is no security level change, 2 must be entered in column 68.

Card 011.—This operation corrects the data for reference date 671001. Note C in column 74 and 9 in column 73.

Card 612.—Normal data entry action to add current data for reference date 680101.

#### Change Matrix (page 34)

This operation changes the following for matrix 000007:

Data Entry Security Word from "ACCT 001" to "ACCT 111",

Secret Security Word from "ACCTSEC" to "blanks",

Confidential Security Word from "ACCTCON" to "ACCTFID",

Agency Code from "DBS 6" to "DBS 4", and Section Code from "2202" to "2222".



# Change Series (page 35)

This operation changes the following for series 1.1,2;

Variance—allowed from "025" to "010", Series Security Word from "ACCTSSW" to "Blanks", and Title to "MILITARY PAY, RAW".

Note the blanks in columns 51-80 of card 003 which is required to blank the previous entry in card 003.

#### Terminate Series (page 36)

This operation terminates series 1.1.6. Data may be retrieved from a terminated series. Note signature of the requesting officer.

# Delete Series (pages 37 and 38)

Deletes series 1 and 1.1 from matrix 000007. Signature of the requesting officer required.

## Delete Matrix (page 39)

This operation to delete matrix 000007 will be rejected. All series within matrix 000007 must be deleted first.



ADD OR CHANGE MATRIX FORM-ISDB P-1	AM OR CM
$T \le D B (1-4)$ (13-19) CODE WORD	SEP 1 F 1862
DBSS (5-8) AGENCY $AM$ (20-21) OPERATION CODE	
2202 (9-12) SECTION OOOOO7 (22-27) MATRIX NUMBER	
CARD # 1	
0 0 1 (28-30) [ CROSS FOOT	
ACCTOOL (31-37) DATA ENTRY SECURITY WORD [ [ [ [ 53-58) LEFT BL.	BLANK
A C C T S E C       (38-44) "SECRET" SECURITY WORD	(ON CM OPERATION
ACCTCD (45-51) "CONFIDENTIAL" SECURITY WORD (63-66) SECTION S	
CARD NO. LONG TITLE (31-80) 50 60 70	08
NATIONAL INCOME AND RTERS, MILLION DOLL TED (SA) FOR SEASON	A, N, D, A, D, J, U, S
0,0,6	
0,0,7	
SHORT TITLE (31-80) 0.0,8 N.A. T.I. Ø. N.A.L., I.N.C. Ø. N.E., &, G.R. Ø.S.S., N.A. T.I. Ø.N.A.L., P.R. Ø.D.U.C.T	
0,0,9 N,A,T,I,\$\phi\n'A,L, \ A,C,C,\$\phi\n'\n',S,\gamma, \ I,\n',C,\$\phi\n',E, \ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	13-001, 0,85
MATRIX NOTE (31-80) WITTHARS AND SANDOWS SEE	T 12/10
F, O, K, C, O, K, C, E, P, I, S, J, M, E, I, M, D, S, M, D, I, T, U, R, E, J, I, G, C, E, E, M, D, E, K, P, E, N, D, I, T, U, R, E, J, I, G, G, E, T, C, S, C, E, C, E, S, C, E, C, E, S, C, E, S, C, E, C,	1,3-50
11,4 NA 7,1 6NA L. ACCOUNTS, INC. 4 (EXP)	3 6
0,4,8,7,5,8,	7
1	
0.2.0	



FORM-TSDB-P-2 CHANGE MATRIX ADD OR

00000 MATRIX NUMBER

STAMP DATE

1258

SEP 16

85. I. d.N.A.L. 0 20 W 8 I,C,A, APPL TWEEN X A DINIE NG BC B E.R. 2 Z M Q S 7 T . ? H Z Ü Y (31-80)F 0 I 9 8 F, O, R, > 2 1 W FOOTNOTE TEXT 3 I U 111 17 NE I P 8 S b A,D. 7.4 HAN 0 ROM N 5 I N 111 S M 9 C j Q C > Z Ţ Q 3 1,2 , 3, 2 CARD NO. (28-30) 2,1 1.8.2 00 6 9 6 3 2 9 4 2 2 9 9 \_ \_  $\infty$ 4



ADD OR	R CHANGE SERIES FORM-TSDB	
TSDB (1-4)	ACCTCCL (13-19) CODE WORD	
$D[\mathcal{B} \mathcal{S} \mathcal{C}]$ (5-8) AGENCY	-	
2 2 0 2 (9-12) SECTION	UCCCCZ (22-27) MATRIX NUMBER	
CARD # 1		
001 (28-30)	COS (51-52) SCALAR FACTOR	
(31-50) SERIES NUMBER (REPEATSON CARDS 002 AND 003)	OG (53-54) FLOATING POINT CHARACTERISTIC  NUMBER OF DECIMALS  OG (55-56) DATA MASK TYPE	
	C25 (57-59) VARIANCE ALLOWED	
	[ [ [ [ ] ] (60-66) SERIES SECURITY WORD	
	4 (72-79)	
	OSSIGNATE TIME Series Number SERIES 10	IDENTIFI
CARD # 2 [0 0 2 (28-30)		
	[ [ [ ] (31-50) SERIES NUMBER	
$\mathcal{D}[\Phi] \mathcal{L}[L A \mathcal{R} S] $ (51)	(51-60) UNIT OF MEASURE	
GRBSS NATION	$ A _{\mathcal{L}} =  D _{\mathcal{R}}  \mathcal{D} _{\mathcal{Q}}  \mathcal{Q} _{\mathcal{L}} = (61-80)$ TITLE (FIRST PART)	
CARD # 3 [0 0 3 (28-30)		
	[ [ [ ] (31-50) SERIES NUMBER	
CT AT MARKLT	$ PRESS_f RAW   S1-80  TITLE $ (SECOND PART)	SECTIO



	ADD OR CI	CHANGE SERIES FORM-TSDB AS OR CS	
TSD	TSDB (1-4)	ACCTCCI (13-19) CODE WORD CED 1 6 1068	A.
0836	(5-8) AGENCY	-	
2202	22 (9-12) SECTION	CCCCCCC) MATRIX NUMBER	
CARD # 1			
001 (28-30)	(0)	CG(51-52) SCALAR FACTOR	
/ / /		CG (53-54) FLOATING POINT CHARACTERISTIC	
(31-50) SE	SERIES NUMBER (REPEATSON CARDS 002 AND 003)	CG (55-56) DATA MASK TYPE	
		C25(57-59) VARIANCE ALLOWED	
		[ [ [ [ [ [ [ (60-66) SERIES SECURITY WORD	
		[C] (67-68) REPORT FREQUENCY	(72-79)
		DATABANK [C 9 2](69-71) UPDATE TIME Series Number	MHSSHOR
CARD # 2	0 0 2 (28-30)		
		(31-50) SERIES NUMBER	
	$ \mathcal{D} \phi  _{\mathcal{L}}  _{\mathcal{A}}  _{\mathcal{A}}  _{\mathcal{S}}  _$	(51-60) UNIT OF MEASURE	
	NETNATIONAL	INCANE (61-80) TITLE (FIRST PART)	
CARD # 3	003 (28-30)		
		(31-50) SERIES NUMBER	
	AT 16AC76R CBS	7,   R	(T)



S F	SDB (1-4)	OR ST.
s &		CTCC((13-19) CODE WORD  (20-21) OPERATION CODE
CARD # 1 [0 0 1] (28-30)	C	OG (51-52) SCALAR FACTOR
(31-50) S	SERIES NUMBER (REPEATSON CARDS 002 AND 003)	FLOATIN NUMBER DATA MA
		C[2[5](57-59) VARIANCE ALLOWED  [ [ [ [ [ [ ] (60-66) SERIES SECURITY WORD
		C  2 (67-68) REPORT FREQUENCY   D
CARD # 2	0 0 2 (28-30)	Jettes, Number
		(31-50) SERIES NUMBER
	00/2/2/4/85 (51-60)	UNIT OF MEASURE
	SALARIES, WAGE	S 2 (61-80) TITLE (FIRST PART)
CARD # 3	0 0 3 (28-30)	
	/ ~ / ^ /	[ [ ] (31-50) SERIES NUMBER
	PPLMTRY. 14860R	[MCOMMS], RAW [51-80] TITLE
		PART)

0



	ADD OR CH.		CS
TSD	B (1-4)	ACCTCC (13-19) CODE WORD CFP 16 1968	1968
085	(5-8) AGENCY		
220	2 (9-12) SECTION	CCCCCCC	
CARD # 1			
0 0 1 (28-30)	(0)	OG (51-52) SCALAR FACTOR	
(31-50) SEI	SERIES NUMBER (REPEATSON CARDS 002 AND 003)	CG (53-54) FLOATING POINT CHARACTERISTIC NUMBER OF DECIMBLS CG (55-56) DATA MASK TYPE	
		CZS (57-59) VARIANCE ALLOWED	
		ACCTSSON (60-66) SERIES SECURITY WORD	
		C 5 (67-68) REPORT FREQUENCY D	(72-79)
		DATABANK  [C   9   9] (69-71) UPDATE TIME Series. Number	SERIES IDENTIFIER
CARD # 2	0 0 2 (28-30)		
	1.1.2	[ [ ] (31-50) SERIES NUMBER	
	$ \partial \varphi(L L A R S ) $ (51-60)	UNIT OF MEASURE	
	MILITARY DAY A	NO ALL (61-80) TITLE (FIRST PART)	
CARD # 3	0 0 3 (28-30)		
	1.1.2	[ [ ] (31-50) SERIES NUMBER	
	DWANCES, RAW		PART)



	ADD OR CE	ADD OR CHANGE SERIES FORM-TSDB	AS OR CS
TSD	[B] (1-4)		CED 1 6 1968
787	SC (5-8) AGENCY	AS (20-21) OPERATION CODE	-
2202	Z (9-12) SECTION	C C C C C C Z (22-27) MATRIX NUMBER	
CARD # 1			
0 0 1 (28-30)	(0)	CC (51-52) SCALAR FACTOR	
(31-50) SE	SERIES NUMBER (REPEATSON CARDS 002 AND 003)	CG (53-54) FLOAFING POINT CHARACTERISTIC NUMBER OF DECIMBA PLACE S  CG (55-56) DATA MASK TYPE	STIC
		C 25 (57-59) VARIANCE ALLOWED	
		[ [ [ [ ] [ ] (60-66) SERIES SECURITY	Y WORD
		CS (67-68) REPORT FREQUENCY DILL	[155] (72-79)
		DATA  C 9 9 (69-71) UPDATE TIME Series	DATABANK MASSAGEK Series Number Series
CARD # 2	002 (28-30)		
	1.1.3	(31-50) SERIES NUMBER	
	$\mathcal{P}[\mathcal{L}[\mathcal{L} \mathcal{A} \mathcal{R}]] \qquad (51-60)$	UNIT OF MEASURE	
	NU DIAMBATICAM		
CARD # 3	003 (28-30)		
	1.1.3	[ [ ] (31-50) SERIES NUMBER	
	BEFORE TAXES,	RAM [ [ [ ] [ 51-80] TIT	TITLE
		<b>可の</b> )	COND PART)



	ADD OR CHANGE	HANGE SERIES FORM-TSDB	
SE	DB (1-4)	E C	
90	S6: (5-8) AGENCY		
220	C 2 (9-12) SECTION	CCCCCCC	
CARD # 1			
001 (28-30)	30)	CK (51-52) SCALAR FACTOR	
(31-50) s	SERIES NUMBER (REPEATSON CARDS 002 AND 003)	CE (53-54) FLOATING POINT CHARACTERISTIC  AUMBER OF DECIMBLS  CE (55-56) DATA MASK TYPE	
		C 2 5 (57-59) VARIANCE ALLOWED	
		[ [ [ [ ] (60-66) SERIES SECURITY WORD	
		[C] (67-68) REPORT FREQUENCY [D]	
		Series Number TIME Series Number TOPMENT	178
CARD # 2	0 0 2 (28-30)		
	1.11.4	(31-50) SERIES NUMBER	
	$\boxed{\mathcal{D}[\mathscr{A}[\mathcal{L}]\mathcal{L}]\mathcal{A}[\mathcal{R}]} \tag{51-60}$	UNIT OF MEASURE	
	DILLIDENDS PNIC	O TR [ 10 2] (61-80) TITLE (FIRST PART)	
CARD # 3	0 0 3 (28-30)		
	W. 1. 1.	[ [ ] (31-50) SERIES NUMBER	
	M-RESTORBITS, K	SECTI (S1-80) TITLE (SECOND PART)	CID CO
		T T V T	_



	ADD OR CI	CHANGE SERIES FORM-TSDB	
TSD	TSDB (1-4)	ACCTOCI (13-19) CODE WORD SEP 16 1968	
188	<u> 8 5 6</u> (5-8) AGENCY		
220	Z (9-12) SECTION	OOOOOO (22-27) MATRIX NUMBER	
CARD # 1			
0 0 1 (28-30)		OB (51-52) SCALAR FACTOR	
(31-50) SER	SERIES NUMBER (REPEATSON CARDS	OCTORS OF DECIMINATION OF DECI	
		9) VARIANCE	
		[ [ [ [ [ [ (60-66) SERIES SECURITY WORD	
		09 (67-68) REPORT FREQUENCY DI     1/5/7 (72-79)	
		DATABANK MMSSRGER  OPP (69-71) UPDATE TIME Series Number SERIES IDE	SER
CARD # 2	0 0 2 (28-30)		
		(31-50) SERIES NUMBER	
	DQ 2 2 4 RS (51-60	(51-60) UNIT OF MEASURE	
	RENT, INTERES	7	
CARD # 3	0 0 3 (28-30)		
	1.1.5	[ [ [ ] (31-50) SERIES NUMBER	
	SC. INVESTMENT	$ \mathcal{T}    L \mathcal{N}   \mathcal{O}   \mathcal{M}   \mathcal{E}  _{J}   \mathcal{R}   \mathcal{A}   \mathcal{M}   $ (SECOND PART)	



	ADD OR CH	ADD OR CHANGE SERIES FORM-TSDB
TSD	B (1-4)	ACCTCCT (13-19) CODE WORD CFP 16 1968
0886	6 (5-8) AGENCY	
220	2 2 0 2 (9-12) SECTION	OOOOO7(22-27) MATRIX NUMBER
CARD # 1		
0 0 1 (28-30)		OG (51-52) SCALAR FACTOR
(31-50) SERIES	IES NUMBER (REPEATSON CARDS 002 AND 003)	OG (53-54) FLOATING POINT CHARACTERISTIC NUMBER OF DECIMAL PLACE.
		OZS (57-59) VARIANCE ALLOWED
		[ [ [ [ [ [ [ [ ( 60-66) SERIES SECURITY WORD
		09 (67-68) REPORT FREQUENCY DI
		DATABANK MASSAGE Series Number SERVES ID
CARD # 2	002 (28-30)	
	9 - / - /	[ [ ] (31-50) SERIES NUMBER
	$\mathcal{D} \phi  \mathcal{L} \mathcal{L} q  \mathcal{R} \mathcal{S}  \qquad (51-60)$	UNIT OF MEASURE
	ACCADI MET INC	C. OF P (61-80) TITLE (FIRST PART)
CARD # 3	003 (28-30)	
	9-11-18	(31-50) SERIES NUMBER
	ARM BPER. FRBM	FARM PROD. J RAM (51-80) TITLE
		(SECOND PART)



	ADD OR CH	
TSDB	B (1-4)	ACCTOOL (13-19) CODE WORD SEP 16 1969
0856	(5-8) AGENCY	AS (20-21) OPERATION CODE
220	2 (9-12) SECTION	OOOOOT
CARD # 1		
001 (28-30)	(0)	OG (51-52) SCALAR FACTOR
		[O] (53-54) FLOATING-POINT CHARACTERISTIC
(31-50) SEE	SERIES NUMBER (REPEATSON CARDS 002 AND 003)	
		CZS(57-59) VARIANCE ALLOWED
		[ [ [ [ [ ] (60-66) SERIES SECURITY WORD
		09 (67-68) REPORT FREQUENCY DI     1/5 9 (72-79)
		Series Number SERIES IDEN
CARD # 2	0 0 2 (28-30)	
	1.1.7	[ [ ] [ ] (31-50) SERIES NUMBER
	$\mathcal{D}[\phi] \mathcal{L}[\mathcal{L}] \mathcal{A}[\mathcal{R}] $ (51-60)	(51-60) UNIT OF MEASURE
	NET INCOME OF	$ \mathcal{N}[\phi \mathcal{N}] -  \mathcal{E}[A]$ (61-80) TITLE (FIRST PART)
CARD # 3	0 0 3 (28-30)	
		[ [ ] (31-50) SERIES NUMBER
	RMUNINCORP.	B U S I M E S J  R A W  (51-80) TITLE



	ADD OR CH	CHANGE SERIES FORM-TSDB
TSDB	1 B (1-4)	ACCZOOZ (13-19) CODE WORD CFP 16 1988
083	886 (5-8) AGENCY	
220	72 (9-12) SECTION	OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO
CARD # 1		
001 (28-30)	30)	06 (51-52) SCALAR FACTOR
1.11.8		OG (53-54) FLOATING POINT CHARACTERISTIC
(31-50) SF	SERIES NUMBER (REPEATSON CARDS 002 AND 003)	SK TY
		O25 (57-59) VARIANCE ALLOWED
		(60-66) SERIES SECURITY WORD
		(67-68) REPORT FREQUENCY D       1/6 0 (72-79)
		OSSM MASSM. Series Number
CARD # 2	0 0 2 (28-30)	
	8 - / - /	[ [ [ ] (31-50) SERIES NUMBER
	D Ø 2 2 4 R S    (51-60) UNIT	UNIT OF MEASURE
	INVENTORY WAL	$ Q A T I \phi V $ (61-80) TITLE (FIRST PART)
CARD # 3	0 0 3 (28-30)	
	8 - / - /	[ [ ] (31-50) SERIES NUMBER
	ADJUSTMENT, RA	A W



$\mathcal{E}_{\mathcal{D}}$	SEP 3 0 1968			FOOTNOTES   F   C   C   C   C   C   C   C   C   C			6		- 0	2	0		20															
	WORD		NUMBER	6) Беитеу (6) Беитеу (6)	1	10 0	3 2	-	2 2		3 6 6	$\rightarrow$	7	+	3 2	1	1	1	1	1	1						-	
	0/ (13-19) CODE WC	OPERATION CODE	(22-27) MATRIX	DATA POINT (57-66)		1,7,3 3	26/1		5,63	_ (	7 7 7 7	1.	00	1	101								-	-				
ENTRY FORM-TSDB	ACCTO	[E] (20-21)	200000	REFERENCE DATE (YR-MO-DY) (51-56)	101089	6,8,0,1,0,1	7 "	6.8.01.0.1	8,0,10,	7	) ,	- 1	101/	5 1 1	6,8,0,1,0,									-				
DATA	7)	8) AGENCY	(9-12) SECTION	SERIES NUMBER (31-50)																								
	ISDB (1-4)	DBS6 (5-8)	2202	CARD NO. (28-30)	0,0,1 1,.,1	2 1 1	004/-7	//.	6/10/	0.0.7 1.0.1.	1 / /	7 / 10 / 10	0/		0,12,1,0,8													





	ADD OR CI	CHANGE SERIES FORM-TSDB	AS OR CS
T S	TSDB (1-4)	4 C C 7 ( 1 / ) (13-19) CODE WORD	DATE STAMP
08	DBS4 (5-8) AGENCY	CS (20-21) OPERATION CODE	UC 1 3 0 1868
2 2	22222 (9-12) SECTION	OOOOO7 (22-27) MATRIX NUMBER	
CARD # 1			
0 0 1 (28-30)	-30)	[[](51-52) SCALAR FACTOR	
1,4		(53-54) FLOATING POINT CHARACTERISTIC	RISTIC
(31-50) s	SERIES NUMBER (REPEATSON CARDS 002 AND 003)	[ [ [55-56] DATA MASK TYPE	
		CIIO (57-59) VARIANCE ALLOWED	
		****** (60-66) SERIES SECURITY	ITY WORD
		(67-68) REPORT FREQUENCY	(72-79
		DA (69-71) UPDATE TIME Serie	DATABANK Series Number
CARD # 2	002 (28-30)		
	1.1.2	(31-50) SERIES NUMBER	
	$\mathcal{D}[\phi]_{\mathcal{L}}[\mathcal{L}[\rho]_{\mathcal{R}}] $ (51-60)	UNIT OF MEASURE	
	MILLITARY PAY,	RAW (61-80) TITLE (FIRST PART)	
CARD # 3	0 0 3 (28-30)		
	1.1.2	[ [ ] (31-50) SERIES NUMBER	
		TI (51-80) TI	TITLE
			SECOND PART)



DM	DATE STAMP	_			DS TS	DATE STAMP							
DELETE MATRIX FORM-TSDB	[ [ [ [ ] (13-19) CODE WORD	DM (20-21) OPERATION CODE	[ [ ] [ ] (22-27) MATRIX NUMBER	CER	E OR TERMINATE SERIES FORM-TSDB				WORD			(30-50) SERIES NUMBER	CER J. Source
	TSDB (1-4)	(5-8) AGENCY	[[ [ (9-12) SECTION	SIGNATURE OF REQUESTING OFFICER	DELETE	T S D B (1-4)	$\boxed{D \mathcal{B} \mathcal{S} \mathcal{A}}$ (5-8) AGENCY	2222 (9-12) SECTION	ACC7/// (13-19) CODE W	73 (20-21) OPERATION CODE	0007 (22-27) MATRIX (28-50) (4AD)		SIGNATURE OF REQUESTING OFFICER



SIGNATURE OF REQUESTING OFFICER.

DM	DATE STAMP					TS	DATE STAMP	NOV 1 9 1968						
DELETE MATRIX FORM-TSDB	[ [ [ [ ] (13-19) CODE WORD	DM (20-21) OPERATION CODE	[ [ [ [ ] [ ] [ ] (22-27) MATRIX NUMBER	ICER		DELETE OR TERMINATE SERIES FORM-TSDB				WORD		5 5 6 7	1 1 1 1 (-30-50) SEKIES NUMBER	
	TSDB (1-4)	(5-8) AGENCY	[[] (9-12) SECTION	SIGNATURE OF REQUESTING OFFICER		DELI	TSDB (1-4)	DBS4 (5-8) AGENCY	2222 (9-12) SECTION	ACCT//// (13-19) CODE	DS (20-21) OPERATION CODE	000007 (22-27) MATRIX (28-30) CARD		



DM	DATE STAMP				DS	DATE STAMP	Mry 1 9 1968							
DELETE MATRIX FORM-TSDB	[ [ [ ] (13-19) CODE WORD	DM (20-21) OPERATION CODE	[[[]] (22-27) MATRIX NUMBER	ER	DELETE OR TERMINATE SERIES FORM-TSDB				WORD		NUMBER ALMBR	(30-50) SERIES NUMBER	J. Sunce	
	T S D B (1-4)	(5-8) AGENCY	[[[] (9-12) SECTION	SIGNATURE OF REQUESTING OFFICER	DELETE	TSDB (1-4)	DBS4 (5-8) AGENCY	2222 (9-12) SECTION	ACCT//// (13-19) CODE WO	DS (20-21) OPERATION CODE	000007 (22-27) MATRIX NU		SIGNATURE OF REQUESTING OFFICER	



SIGNATURE OF REQUESTING OFFICER -

	DELETE MATRIX FORM-TSDB	MQ
T S D B (1-4)	A C C 7 / / / (13-19) CODE WORD	S
734 (5-8) AGENCY	DM (20-21) OPERATION CODE	8681 0 7 Ann
2222 (9-12) SECTION	OCOCO (22-27) MATRIX NUMBER	
SIGNATURE OF REQUESTING OFFICER		
DELETE	DELETE OR TERMINATE SERIES FORM-TSDB	DS
T S D B (1-4)		DATE STAMP
[[[]] (5-8) AGENCY		
[ [ (9-12) SECTION		
(13-19) CODE WORD	D	
[[] (20-21) OPERATION CODE		
	NUMBER NUMBER	
	(30-50) SERIES NUMBER	



DATE CANSIM DATA ENTRY 2202 SECTION DBS6

AGENCY

SEPTEMBER 18, 1968

TIME

1 AM 5:58 PAGE

> MATRIX - 000007 \*\* ADD MATRIX \*\*

- YES CROSSFOOT PRESENT YES YES SECURITY WORD\* CONFIDENTIAL DATA ENTRY

BY QUARTERS, MILLION DOLLARS, UNADJUSTED (RAW) AND ADJUSTED LONG TITLE: NATIONAL INCOME AND GROSS NATIONAL PRODUCT, (SA) FOR SEASONALITY

SHORT TITLE:NATIONAL INCOME & GROSS NATIONAL PRODUCT

NATIONAL ACCOUNTS, INCOME & EXPENDITURES (13-001) DBS SOURCE: FOR CONCEPTS, METHODS AND SOURCES SEE NATIONAL ACCOUNTS, INCOME AND EXPENDITURE, 1926-1956, 13-502, DBS. FOR FOOTNOTES CONSULT ANNUAL PUBLICATIONS OF NATIONAL ACCOUNTS, INC & EXP, 13-201, DBS. PUBLISHED APPROXIMATELY 88 CALENDAR DAYS AFTER END OF REFERENCE QUARTER DATA NOTE:

FOOTNOTE 1) INCLUDES THE WITHHOLDING TAX APPLICABLE TO THIS ITEM.

2) INCL. CHANGE IN FARM INVENTORIES. AN ADJUSTMENT HAS BEEN MADE FOR ACCRUED NET EARNINGS OF FARM OPERATORS FROM C.W.B.

3) INCLUDES NET INCOME OF INDEPENDENT PROFESSIONAL PRACTITIONERS.

4) RELATES TO THE DIFFERENCE BETWEEN THE VALUE OF PHYSICAL CHANGE IN INVENTORIES AND THE CHANGE IN ROOK VAIUE

SERIES MATRIX - 000007 \* SERIES ADD \*\*

06 - MILLIONS SCALAR FACTOR: PERCENT 25 VARIANCE ALLOWED:

9 FLOATING POINT CHARACTERISTIC:

LIND DAYS 66 UPDATE TIME: 09 - QUARTERLY REPORT FREQUENCY:

N0

PROTECTED SERIES:

Q DATA BANK SERIES NUMBER: RAW GROSS NATIONAL PRODUCT AT MARKET PRICES, TITLE:

164

6\$\$,\$\$\$,\$\$\$,\$ -

90

DATA MASK:

DOLLARS

OF MEASURE:

SERIES - 1.1 MATRIX. - 000007 \*\* SERIES \*\* ADD - MILLIONS 90 SCALAR FACTOR: PERCENT 25 VARIANCE ALLOWED: 9 FLOATING POINT CHARACTERISTIC: 6\$\$,\$\$\$,\$\$\$,\$ -

90

DATA MASK:

0N

PROTECTED SERIES:

DOLLARS UNIT OF MEASURE: DAYS 66 UPDATE TIME: QUARTERLY 1 60 REPORT FREQUENCY:

191 Ω DATA BANK SERIES NUMBER: NET NATIONAL INCOME AT FACTOR COST, RAW TITLE:



** ADD SERIES **	MATRIX - 000007	SERIES - 1.1.1
FLOATING POINT CHARACTERISTIC: 6	VARIANCE ALLOWED: 25 PERCENT	SCALAR FACTOR: 06 - MILLIONS
PROTECTED SERIES: NO		DATA MASK: 06 - \$,\$\$,\$\$,\$\$9
REPORT FREQUENCY: 09 - QUARTERLY	UPDATE TIME: 99 DAYS	UNIT OF MEASURE: DOLLARS
TITLE: SALARIES, WAGES & SUPPLEMENT	& SUPPLEMENTRY LABOUR INCOME, RAW	DATA BANK SERIES NUMBER: D 153
** ADD SERIES **	MATRIX - 000007	SERIES - 1.1.2
FLOATING POINT CHARACTERISTIC: 6	VARIANCE ALLOWED: 25 PERCENT	SCALAR FACTOR: 06 - MILLIONS
PROTECTED SERIES: YES		DATA MASK: 06 - \$,\$\$\$,\$\$\$,\$9
REPORT FREQUENCY: 09 - QUARTERLY	UPDATE TIME: 99 DAYS	UNIT OF MEASURE: DOLLARS
TITLE: MILITARY PAY AND ALLOWANCES, RAW	RAW	DATA BANK SERIES NUMBER: D 154
** ADD SERIES **	MATRIX - 000007	SERIES - 1.1.3
FLOATING POINT CHARACTERISTIC: 6	VARIANCE ALLOWED: 25 PERCENT	SCALAR FACTOR: 06 - MILLIONS
PROTECTED SERIES: NO		DATA MASK: 06 - \$,\$\$,\$\$,\$\$9
REPORT FREQUENCY: 09 - QUARTERLY	UPDATE TIME: 99 DAYS	UNIT OF MEASURE: DOLLARS
TITLE: CORPORATION PROFITS BEFORE TAXES,	AXES, RAW	DATA BANK SERIES NUMBER: D 155
** ADD SERIES **	MATRIX - 000007	SERIES - 1.1.4
FLOATING POINT CHARACTERISTIC: 6	VARIANCE ALLOWED: 25 PERCENT	SCALAR FACTOR: 06 - MILLIONS
PROTECTED SERIES: NO		DATA MASK: 06 - \$,\$\$,\$\$\$,\$\$9
REPORT FREQUENCY: 09 - QUARTERLY	UPDATE TIME: 99 DAYS	UNIT OF MEASURE: DOLLARS

PAGE 2 TIME 5:58 AM

SEPTEMBER 18, 1968

DATE

CANSIM DATA ENTRY

SECTION 2202

AGENCY DBS6



AGENCY DBS6 SECTION 2202	CANSIM DATA ENTRY	PAGE 3 DATE SEPTEMBER 18, 1968 TIME 5:58 AM
TITLE: DIVIDENDS PAID TO NON-RESIDENTS,	NTS, RAW	DATA BANK SERIES NUMBER; D 156
** ADD SERIES **	MATRIX - 000007	SERIES - 1.1.5
FLOATING POINT CHARACTERISTIC: 6	VARIANCE ALLOWED: 25 PERCENT	SCALAR FACTOR: 06 - MILLIONS
PROTECTED SERIES: NO		DATA MASK: 06 - \$,\$\$\$,\$\$\$,\$\$9
REPORT FREQUENCY: 09 - QUARTERLY	UPDATE TIME; 99 DAYS	UNIT OF MEASURE: DOLLARS
TITLE: RENT, INTEREST, & MISC. INVESTMENT	SIMENT INCOME, RAW	DATA BANK SERIES NUMBER: D 157
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	4 6 6 7 7 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8	
** ADD SERIES **	MATRIX - 000007	SERIES - 1.1.6
FLOATING POINT CHARACTERISTIC: 6	VARIANCE ALLOWED: 25 PERCENT	SCALAR FACTOR: 06 - MILLIONS
PROTECTED SERIES: NO		DATA MASK: 06 - \$,\$\$\$,\$\$\$,\$\$9
REPORT FREQUENCY: 09 - QUARTERLY	UPDATE TIME: 99 DAYS	UNIT OF MEASURE: DOLLARS
TITLE: ACCRD, NET INC, OF FARM OPER. FROM	. FROM FARM PROD., RAW	DATA BANK SERIES NUMBER: D 158
** ADD SERIES **	MATRIX - 000007	SERIES - 1.1.7
FLOATING POINT CHARACTERISTIC: 6	VARIANCE ALLOWED: 25 PERCENT	SCALAR FACTOR: 06 - MILLIONS
PROTECTED SERIES: NO		DATA MASK: 06 - \$,\$\$\$,\$\$\$,\$\$9
REPORT FREQUENCY: 09 - QUARTERLY	UPDATE TIME: 99 DAYS	UNIT OF MEASURE: DOLLARS
TITLE: NET INCOME OF NON-FARM UNINCORP. BUSINESS,	ORP. BUSINESS, RAW	DATA BANK SERIES NUMBER: D 159
** ADD SERIES **	MATRIX - 000007	SERIES - 1.1.8
FLOATING POINT CHARACTERISTIC: 6	VARIANCE ALLOWED: 25 PERCENT	SCALAR FACTOR: 06 - MILLIONS
PROTECTED SERIES: NO		DATA MASK: 12 - S,SSS,SSS,SS9



7	AM		
PAGE	5:58		
	TIME		
TRY	DATE SEPTEMBER 18, 1968	UNIT OF MEASURE: DOLLARS	DATA BANK SERIES NUMBER: D 160
CANSIM DATA ENTRY			
		99 DA	
		UPDATE TIME: 99 DAYS	, RAW
	2202	Ŋ.	JSTMENT
	SECTION	REPORT FREQUENCY: 09 - QUARTERLY	TITLE: INVENTORY VALUATION ADJUSTMENT
	DBS6	'REQUENCY:	INVENTORY
	AGENCY DBS6	REPORT F	TITLE:



8:45 AM		ERROR MESSAGE												
TIME		AR ERI												
, 1968		0V A				6		6	C	1	6	6	0 6	
OCTOBER 4, 1968		FTNT						2						
DATE		SI	7	~	~1	7	7	7		2	2	7		2
		EI	~	~	$\sim$	~	~	3		3	c	4		3
ENTRY		DATE	680,300	680,300	68030.0	680300	680300	680300	671210	671200	680300	006029	671200	680300
CANSIM DATA ENTRY		PERCT	-1.4	-1.1	-18.8	-30.1	-7.4	-54.8		18.5	-28.9	-61.1	184.8	-13.8
CAN	MATRIX - 000007	THIS PERIOD	8201	173	1120	-192	1124	56		972	691	33	76-	-81
SECT10N 2202	MATRIX .	LAST PERIOD	8315	176	1380	-275	1215	124		820	972	-85	-33	76-
DBS6	DATA	SERIES	1.1.1	1.1.2	1.1.3	1.1.4	1.1.5	1.1.6	1.1.7	1.1.7	1.1.7	1.1.8	1.1.8	1.1.8
AGENCY	** ENTER DATA	CARD	001	700	003	004	005	900	007	800	600	010	011	012



	6:02
	TIME
	1968
	NOVEMBER 4,
	DATA
CANSIM DATA ENTRY	
	2202
	SECTION
1	DBS6

AGENCY

AM O.

> CROSSFOOT - YES NEW AGENCY IDENTIFICATION - DBS4 NEW SECTION IDENTIFICATION - 2222 MATRIX - 000007 YES YES PRESENT YES YES YES CHANGE MATRIX \*\* \*SECURITY WORD\* CONFIDENTIAL DATA ENTRY SECRET

NATIONAL INCOME AND GROSS NATIONAL PRODUCT, BY QUARTERS, MILLION DOLLARS, UNADJUSTED (RAW) AND ADJUSTED LONG TITLE:

(SA) FOR SEASONALITY

SHORT TITLE: NATIONAL INCOME & GROSS NATIONAL PRODUCT

NATIONAL ACCOUNTS, INCOME & EXPENDITURES (13-001)DBS SOURCE:

NOTE:

FOR CONCEPTS, METHODS AND SOURCES SEE NATIONAL ACCOUNTS, INCOME AND EXPENDITURE, 1926-1956, 13-502, DBS. FOR FOOTNOTES CONSULT ANNUAL PUBLICATIONS OF NATIONAL ACCOUNTS, INC & EXP, 13-201, DBS. DATA PUBLISHED APPROXIMATELY 88 CALENDAR DAYS AFTER END OF REFERENCE QUARTER

INCLUDES THE WITHHOLDING TAX APPLICABLE TO THIS ITEM. FOOTNOTE 1)
2)
3)

AN ADJUSTMENT HAS BEEN MADE FOR ACCRUED NET EARNINGS OF FARM OPERATORS FROM C.W.B. INCLUDES NET INCOME OF INDEPENDENT PROFESSIONAL PRACTITIONERS. RELATES TO THE DIFFERENCE BETWEEN THE VALUE OF PHYSICAL CHANGE IN INVENTORIES AND THE CHANGE IN BOOK VALUE. INCL. CHANGE IN FARM INVENTORIES.

154 6\$\$,\$\$\$,\$\$\$,\$ - 90 O6 - MILLIONS A DOLLARS DATA BANK SERIES NUMBER: UNIT OF MEASURE: SCALAR FACTOR: SERIES - 1.1.2 DATA MASK: 10 PERCENT 99 DAYS VARIANCE ALLOWED: MATRIX - 000007 UPDATE TIME: 9 09 - QUARTERLY FLOATING POINT CHARACTERISTIC: MILITARY PAY, RAW NO PROTECTED SERIES: REPORT FREQUENCY: \*\* CHANGE SERIES TITLE:



AM NOVEMBER 15, 1968 TIME 3:01 SERIES - 1.1.6 DATE CANSIM DATA ENTRY MATRIX - 000007 SECTION 2222 \*\* TERMINATE SERIES \*\* DBS 4 AGENCY

SERIES TERMINATED

- 46 **-**



9:15 AM				
DATE NOVEMBER 22, 1968 IIME	SERIES - 1	SERIES DELETED	SERIES - 1.1	SERIES DELETED
CANSIM DATA ENTRY	MATRIX - 000007		MATRIX - 000007	
AGENCY DBS4 SECTION 2222	** DELETE SERIES **		** DELETE SERIES **	



CANSIM DATA ENTRY SECTION 2222

MATRIX - 000007

TSDBDBS42222ACT111DM000007

\*\* ERROR \*\*

- 48 -

DATE

DELETE MATRIX REJECTED. CONTAINS ONE OR MORE SERIES.

NOVEMBER 29, 1968

TIME 8:14 AM

DBS4

\*\* DELETE MATRIX \*\*

AGENCY



CANSIM: Operation Manual for Data Entry (Catalogue Number 12-530)
Amendment Number 1 August 18, 1969

## DATA ENTRY ERROR MESSAGES (Section 6)

The following error messages are additions to those listed in section 6. The transaction must be corrected and resubmitted.

1 - BLANK OR INVALID SERIES NUMBER - this message is possible for AS, CS, TS, DS, or ED transaction.

## Possible reasons for rejection are:

- 1. Blank series number
- 2. More than 9 levels
- 3. More than 3 digits per level
- 4. A level starting with a '0'
- Series number with other than numerics and/or period
- 6. Series number starting or ending with a period
- Series number with more than 1 consecutive period.

 $\underline{2}$  - DATAPOINT AND ENTRY TYPE INCOMPATIBLE - this message is on ED transaction only.

Entry type 3 must be used on updates against a type 2 when data values are the  $\underline{same}$ . Entry type 4 must be used on updates against a type 2 when data values are different.



#### **ERROR MESSAGES**

#### General

The CANSIM system will edit all action requests. Unless requests are correct in format etc., an error message will be printed out together with the action request. The rejected action request should be corrected and resubmitted. In some cases,

the error message may be only a warning that an error may have existed in the action request. For example, although an error message "Crossfoot failed in level 1.2 by 701" is printed the data has been entered on the base. The list of data entries entered will be included in the printout of action requests to assist in finding the error.

# CANSIM: Error Messages

Messages .		Action requests to which relate					
		CM	DM	AS	CS	TS/DS	ED
Blank or invalid system identification	X	X	X	X	X	X	X
Blank agency	X	X	X	X	X	X	X
Blank section	X	X	X	X	X	X	X
Blank or invalid operation code	X	X	X	X	X	X	X
Blank or invalid matrix number	X	X	X	X	X	X	X
Matrix number already in base	X						
Blank or invalid card number	X	X		X	X		X
Card 001 missing, operation rejected	X	X		X	X		
Card number XXX is duplicated, first card only accepted	X	X		X	X		
Invalid card number	X	X		X	X		X
Blank data entry security word	X						
Blank or invalid crossfoot field	X						
Wrong agency for this matrix		X	X	X	X	X	X
Wrong section for this matrix		X	X	X	X	X	X
Blank code word		X	X	X	X	X	X
Wrong code word		X	X	X	X	X	X
Matrix number not in base		X	X	X	X	X	X
Series number already in matrix				X	X	X	
Blank or invalid scalar factor				X			
Blank floating point characteristic				X			
Blank or invalid data mask type				X			
Blank variance				X			
Blank or invalid report frequency				X			
Blank or invalid update time			ĺ	X			
Blank unit of measure				X			
Series number not in matrix				21	X	X	X
Blank or invalid reference date					21	21	X
Entry requested to a terminated series					*		X
Reference date inconsistent with frequency		f			21		X
Date point blank or not numeric	i						X
Blank or invalid data entry type							X
Invalid security level							X
Invalid footnote indicator							X
Invalid action request code							X
Entry type 1 cannot replace types 2, 3, or 4							X
Entry type 2 cannot replace types 2, 3, or 4							X
Entry type 3 cannot replace types 3 or 4							X
Entry type 4 cannot replace types 1 or 2							X
Entry type 4 cannot replace blank data fields							X
Entry type 5 cannot replace existing data point							X
Variance exceeded							X
Data field blank, Delete ignored							X
Crossfoot failed. Error =			37				X
before matrix rejected. Contains one of more series			X				



## Error Messages - Concluded

		Action requests to which relate						
Messages	AM	СМ	DM	AS	CS	TS/DS	ED	
Blank or invalid series number  Data point and entry type incompatible  R - Previous data point not entered  W - Blank long title  W - Blank short title  W - Blank source  W - Referenced FTNT non-existent  W - Ensure no reference to footnote	X X X	X X X		X	X	Х	X X X	

 $R-\mbox{rejected, transaction must be resubmitted.} \label{eq:resubmitted} W-\mbox{warning only.}$ 

Note: The error messages on page 49 will be revised to begin with R or W where applicable.



#### REPORT FREQUENCY AND REFERENCE DATES

The frequency of updates for a series is indicated by a two digit code in columns 67-68 of card 001 of AS. When a data point is entered (ED), the reference date must be consistent with the report

frequency for the series as entered in the series header. Frequency codes now programmed for use are shown below, together with samples of matching reference dates.

Frequency	Frequency code	Reference date	Example
Daily reports	01	Sept. 1/67	670901
Weekly reports	02	Sept. 1/67	670901
10-day reports	03	Sept. 1/67	670901
Bi-weekly	04	Sept. 1/67	670901
Semi-monthly	05	Sept. 1/67	670901
Monthly	06	Sept. 1/67	670901
Bi-monthly	07	Sept. 1/67	670901
Five times per year	08	Sept. 1967	670900
Quarterly	09	Sept. 1967	670900
Three times per year	10	Sept. 1967	670900
Semi-annual	11	Dec. 1967	6712
Annual	12	1967	67
3i-annual	13	1967	67
Fri-annual	14	1967	67
Every fourth year	15	1967	67
Every fifth year	16	1967	67
Every decade	17	1961	61



#### DECK STRUCTURE

Within any given request the card sequence is given by the card numbers. Numbers must be sequential.

Jobs submitted with different operation codes should have cards in the following order for any given matrix number:

 $\operatorname{AM}$ 

CM

AS

CS ED

TS

DS

DM

This means that all series cards (AS and CS) for series within matrix 1 will follow matrix cards (AM and CM) for matrix 1. ED cards for series within matrix 1, will follow all series cards for matrix 1. The crossfoot check is performed after the last ED entry for any given matrix.



# GLOSSARY

Action Accepted	A successful submission. For examples see Section 5.
Action Requests	There are 8 action requests in the data entry program. See Section 3.2 and Section 9.
Add Matrix	Operation Code AM enters the matrix header into the data base. See Section 3.3.
Add Series	Operation Code AS enters the series header into the base. See Section $3.5.$
Agency Code	A 4 character (maximum) mnemonic code identifying the agency which is responsible for accuracy and security of data.
Alphanumeric	Letters, digits, or permissible special symbols, or any combination of these, are indicated by the word "characters" in card format, Section 3.1.
Asterisk	An asterisk before a data point on the printout from a data entry action indicates the entry made by this action. In the Change Matrix and Change Series actions, asterisks are used to blank out entries in the header. See Sections 3.4 and 3.6.
Auto-duplicate	Where entries in specified columns are common to a large number of cards, it is possible to have these keypunched once and reproduced automatically.
Base	See Data Base.
Blank	"b" indicates a blank field.
CANSIM	Canadian Socio-Economic Information Management System. The system consists of sub-systems, or computer programs, such as the data entry program and retrieval program.
Card Number	Cards used in some CANSIM operations are identified by a card number. See Card Formats, Section $3.1.$
Change Matrix	Operation Code CM changes any information in columns 31-80 of the matrix header. See Section 3.4.
Change Series	Operation Code CS changes any information in columns 51-80 of a series header except the report frequency. See Section 3.6.
Character	Character is used in card format examples of Section 3.1 to indicate that alphabetic, numeric, or permissible special characters may be used in any combination.
Characteristic	See Floating-point Characteristic.
Closed File	This describes a series which will not be updated, for example "Inventories on unrevised SIC," which has been unavailable since 1952. See also terminate.
Confidential	One of the 4 levels of security possible for data points. The confidential security word is entered in the Matrix Header. The data points with this security level must have "2" in column 68 of the ED form, See Security and Level of Security.
Crossfoot	The data entry program provides for summing across series for checking purposes where components sum to totals. Crossfoot may be requested in the Add Matrix action request. Failure of the check is indicated in the error message, "Crossfoot Failed. Error = ". The list of data entries entered will be included in the printout of action requests to assist in finding the error in the data base.



Crossfoot - Concluded	Minus signs are permitted in a matrix for which crossfooting is performed. Values must be negative, however, such as a negative inventory adjustment. The series numbers should be structured to handle cases where positive values are deducted to yield a residual series.
	For example: 1.1 Personal Income 1.1.1 Direct Taxes 1.1.2 Disposable Personal Income.
	Since crossfooting is performed by levels, more than one error message may result in a matrix.
Current File	See Open File.
Data	Individual data points are entered into the CANSIM base; however, these data points represent single observations in time series such as monthly or annual series of commercial failures in Ontario from January 1951 to date.
Data Base	A group of records (individual series) having a common coding and format.
Data Entry Type	Data Entry Types are coded as follows:  1 — Projection into future  2 — Estimate of current figure  3 — Current figure  4 — Revision of current figure  5 — Initial entry of data
	For details, see Section 3.7.
Data Point	One observation, for example, January 1967 value of exports to Great Britain, is a data point. (Always right justified, with no commas or decimals. If sign required, enter the sign immediately preceding the first digit).
Data-Bank Control  GENERAL TIME SERIES THE	Located in Current Business Indicators and Time Series Data Bank Section at DBS. Maintains registers of matrix numbers, agency and section responsibility codes of DBS and other Government Users. Receives and controls all data entry and retrieval action requests within DBS.
Deck Structure	The prescribed sequence of cards for submitting action requests. See Section 9.
Delete	Two action request, Delete Matrix and Delete Series, remove the information from the data base. These operations end with a card-out routine which provides the card decks for resubmission when the delete action has been made in error, or of change the report frequency or ser number of a series.
Directory	A listing of Matrices and Series included in the base is called the Directory. The preparation of matrix and series titles should take into consideration the need to provide all essential information in the Directory. Note that the Directory lists all series in order of matrix number regardless of the security level. If you do not wish to advertise in the Directory the existence of a secured series, the series title may be coded.
Edit	Editing made to action requests to ensure correct agency code, crossfoot check etc.
Entry Type	See Data Entry Type.
Error Message	See Section 6.
Expected Time of Update	See Update Time.



	GLOSSARY -	- Continued	
Field	A group of card cold data or other inform	umns specified by the card forma nation required in the data entry p	at for use in entering program.
File	A collection or related records treated as a unit.		
Floating - point Characteristic	without decimal poi the size of number of	ne system as significant digits a ints. Therefore, to provide suffici- required during arithmetic opera or subtracted is indicated. The ng:	ient information as to tions, the number of
	Floating Point characteristic	Stored As	Number as printed
	05 06 -2 -1	0000000063 0000000016 0000000138 0000000682	6.3 million 16 million \$1.38 68.2 (index no.)
Footnote	the footnotes are data points. A singl	9 footnotes in one matrix header entered in the matrix header, foode data point may refer to a max otnotes is made by the Entry D7.	otnotes refer only to simum of 4 footnotes,
Format	Instructions supplied in which information what is in each field	ed to the computer on the size and to be readwill be found as welld.	and location of fields ll as a description of
Frequency	See Report Frequen	cy.	
Justified	Left justified — star Right justified — sta	t entry in the left hand column of rt entry in the right hand column	f the field. of the field.
Leading Zeros	When right justified digits partially complete a data field, the program may require that remaining left hand columns of the field be filled with leading zeros.		
Level of Security	Each data point in the base may have any one of four levels of security. The security level of each data point is indicated by a single digit (col. 68 of ED form). The four security levels are as follows:		

- (a) **Public.**—Data which is freely available to the public (a blank in col 68 and no security code word).
- (b) Series Secure. Utilized when its necessary to discriminate between users of individual series within the same matrix ("3" in column 68 and security word in the series header).
- (c) **Confidential.**—Data may be so classified because of dubious quality or pending release date. ("2" in column 68 and confidential security word in the matrix header.)
- (d) Secret. Data may be so classified under the security provisions of the Statistics Act. Any retrieval of data classified secret will be sent to the designated persons in the responsible section and agency. ("1" in column 68 and secret security word in the matrix header.)

A secured data point (codes 1, 2, or 3 in col. 68) cannot be retrieved without the appropriate security word being used. The secret code word can retrieve confidential, or series—secure data, but a confidential code word cannot retrieve secret data. The Data Entry Security Word should not be confused with the three security words. This word is known only by the responsible section or agency and is required to add or make changes to the base. This word or code should be safeguarded as it will retrieve all series regardless of other security classification.



Level of Security - Concluded	Notice will be sent to the responsible agency or section of any retrievals or attempted retrievals of secure data by either the responsible or another agency.
Long Title	The long title may have 300 characters. This is entered in the matrix header in the ADD MATRIX operation. All information necessary to describe the matrix should be included, such as identification of data, frequency, unit of measure, seasonally adjusted (SA) and unadjusted (RAW). This title appears in the Directory. See Directory.
Mask Type	-See-Section 7.
Matrix Header	series in the matrix. See Section 3.3, ADD MATRIX.
Matrix Number	Matrix numbers are assigned and recorded by Data Bank Control. Numbers are assigned when matrices are to be entered into the base. Blocks are never allocated for future use.  A maximum of 6 digits is allowed for a matrix number. Leading zeros must be entered.
Mnemonic Code	
mionic Code	call.
U. 1354 AT (51 M., 1, 11)	A matrix may have <b>one</b> variable length note of up to 500 characters. See ADD MATRIX, Section 3.3.
Open File	Series which require updating to include current statistics, as opposed to closed or dead file.
Operation Code	There are 8 types of action requests or operation codes in the data entry program. See Section 3.2.
Over-ride	When data points are entered, the machine edit may include an instruction to check the percentage change from the preceding period in the base (See Add Series Section 2.5). A figure exceeding the variance-allowed may only be entered by indicating over-ride on the ED action request.
Printout	See Section 5 for examples of data printouts. In addition to the printout of successful actions, it is possible to retrieve data for the full period in table format. See CANSIM Retrieval Manual.
Projection	One type of data entry permitted is a projection into the future. The projection may be replaced only by a projection, an estimate of the current figure, or the current figure. See Section 3.7.
Public	Public as a security level, means that the statistics are freely available to the public with no security restrictions.
Record	A logical grouping of data which is handled by the computer as a single entry.
Reference Date	The calender period to which the data value applies. For examples see Section 8. To <b>correct</b> a reference date existing in the base using the Data Entry Action (ED), first, delete the data point slot, and then resubmit the data with the proper reference date. Refer to Section 3.7.
Report Frequency	See Section 8 for codes and examples. Report frequency indicates the periodicity of data available. Note that you cannot mix report frequencies in a series. For example, Labour Force, quarterly from 1946, monthly from 1952, would require two separate series within the matrix.



	GEOGGART Committee
Retrieval	The CANSIM Phase 1 has a small number of commands which enable the user to retrieve data printed in table format or in machine readable form compatible with analytical and other programs which have been operational under the DATABANK-MASSAGER system. Additional commands will be added in the future.
Revision	See Data Entry Type.
Rounding	The DBS rule for rounding is as follows: an odd number followed by a 5 is always raised by 1; an even number followed by a 5 is raised by 1 except when the 5 is followed by zeros (an exact half).
	For example:  3.5  4.5 — rounds to 4  3.5001 rounds to 4  4.5001  7.5001 rounds to 5
Dam	4.51
	A single, continuous performance of a computer routine.
Scalar Factor or Power Factor	This code indicates the magnitude of the data entered in the ED form.  For example:  billions—enter 09 = 1,000,000,000  millions—enter 06 = 1,000,000  thousands—enter 03 = 1,000  tens—enter 01 = 10  units—enter 00 = 1  also, indexes—enter 00  percentages—enter 00
	In selecting the scalar factor consider carefully the size of the data. It is advisable to use the smallest possible scalar factor to permit maximum number of digits in the data.
Secret	The highest retrieval security classification.
Section Code	A four-character mnemonic code identifying the section responsible for a given matrix.
Section Responsible	Section responsible for availability, accuracy, and security of a given matrix.
Security	Confidentiality of CANSIM is based primarily on code or passwords. To enter data into the base in the form of a new table (matrix), the agency must include a Data Entry Security Word. Future changes (updates and revisions) to this matrix must be accompanied by this security word (Code Word). The Data Entry Security Word can also be changed. Retrievals are similarly controlled. When secured data points are entered, a single digit code is appended indicating the security level of that specific data point. A "1" code makes that data point secret, and "2" confidential. At the time the matrix header is established on the base with the Data Entry Security Word, the Secret and Confidential security word should also be added. When it is necessary to discriminate between users of individual series in the same matrix, a "3" code may be used to make that data point secure. A series which has data points with "3" code is referred to as series—secured. The "3" code security word should be added to the series header at the time the series is established. Leaving the security column blank (public) allows that data point to be retrieved without any security check. The security words for "1", "2", or "3" codes may be changed.
Security Code	There are four levels of security possible which restrict the retrieval of a data point or series: Secret, Confidential, Series—secure, and Public. In addition, a Data Entry Security Word is necessary to alter or add to the contents of any series. See also Security.

the contents of any series. See also Security.



Series ..... A sequence of data points arranged by time which are retrieved as a single unit together with the series header. Series Header The number and title of a time series. The header also contains all necessary information about the series such as the scalar factor, unit of measure, mask type, etc.

> An "open-ended" descriptor which allows for the identification of a series within a matrix. A maximum of 20 characters (digits and decimal points) is allowed for series identification, and must not exceed 9 levels (i.e. maximum of 8 decimals). Numbers are left justified in column numbers 31-50.

> Within a matrix, series are entered in a hierarchical structure. Series numbers designate the level of detail in the matrix and the position of the series within its level.

#### For example:

01 exports and re-exports total	(1)
02 re-exports	(1.1)
02 domestic exports total	(1.2)
03 live animals total	(1.2.1)
03 food, feed, bev. and tob. total	(1.2.2)
04 meat and meat preps	(1.2.2.1)
04 fish, fresh and frozen	(1.2.2.2)

In the sample line 04 fish, fresh and frozen, the "04" shows the level of aggregation, the "(1.2.2.2)" the series and level indicator. The figure 1.2.2.2 is the series number and may be read as "the second 04 item under the second 03 level under the second 02 level under the first total".

This structure makes possible one automatic machine check of the data base. After each action request is completed, crossfoot is performed (if requested in AM by a 1 in col. 52), by which each level is aggregated to the next highest level, Failure of the check results in an error message. There is an implication that the levels will be complete, i.e. contain all data. In some cases to perform crossfoot, it may be necessary to introduce dummy residual series (with a security code if desired).

The following are causes of invalid series numbers:

- 1. More than 9 levels.
- 2. More than 3 digits per level.
- 3. First digit of a level is a zero.
- 4. Characters other than numerics or period.
- 5. Series number starts or ends with a period.
- 6. Series number has consecutive periods.

A fifty-character title for a series. Note that the title identifying the level need not be repeated for each series within the level.

#### For example:

- 1. Expenditure on goods and services
  - 1.1 Federal
  - 1.2 Provincial
  - 1.3 Municipal

In the case of a matrix containing both seasonally adjusted (SA) and unadjusted (RAW), this information will appear in the matrix long title (See Long Title), and each series title will indicate (RAW) or (SA). Where units vary within a matrix, it may be possible to provide sufficient information in the matrix title or note; otherwise the units must appear in the series title.

Short Title A forty-character title for a matrix, abbreviated from the long title.

Series Title

Series Number



#### GROSSARY - Concluded

Source	A fifty-character field describing the "source" of the data and used for publication purposes (name of publication, publication number, and agency).		
Submission	A set of data and/or operations submitted at one time by the responsible agency for updating the data base.		
Terminate	A series may be terminated and this prevents any further updating of the series but does not delete the series from the data base. Data may be retrieved from a terminated series.		
Title	See Long or Short Title.		
TSDB	System Identification (Time Series Data Bank), must appear on all data entry cards.		
Update Time	Update time is the number of days after the last data entry when the next update can be expected. In future, CANSIM will list the overdue updates by Agency and Section codes.		
Variance Allowed	Variance-allowed is the amount of variation expressed as a percentage between prior data and the data being entered. Variance is not checked when the data point being entered is an initial entry, projection, or estimate. Where a data point (code 3 or 4) is known to exceed the variance-allowed entered in the series header, it is possible to override this check by entering "9" in column 73 of the ED form. In establishing the variance-allowed for a series, one ruel-of-thumb would be to expect rejection on 5% of data entries.		
Number of Decimal Places	This term and its associated codes specify the number of digits to the right of the decimal. For example:		
	Number of Code Example decimals		
	0       00       100         1       01       100.1         2       02       100.12         3       03       100.123         4       04       100.1234         5       05       100.12345		







# CANSIM: Operation Manual for Data Entry (Catalogue No. 12-350) Amendment Number 5 February 1971.

Please make the minor revisions yourself as indicated; where there are major revisions, new printed pages are enclosed. The previous four amendments may be discarded when this list of revisions has been made.

Title page - replace this page with the enclosed page.

Table of Contents - cross out the entire line which refers to page 50.

Pages 9, 12, 17 and 18 - change the sixth field of card format to

	Column Number	Contents	Explanation
22	- 27	6 digits maximum, right justified.	Matrix Number.
Page	12 - change the	following fields of card	format to
51	<b>-</b> 52	00 to 09	Scalar factor or power
<u>-53</u>	- 54	00 to 09	factor. Number of decimal places.
55	- 56	blanks	

Pages 15 and 16 - replace these pages.

Pages 23, 24, 25, 26, 27, 28, 29, 30, 31, and 32 - change columns 53 - 54 of card 1 to contain "NUMBER OF DECIMALS" instead of "FLOATING POINT CHARACTERISTIC", and columns 72 - 79 to contain "MASSAGER SERIES IDENTIFIER" instead of "DATABANK SERIES NUMBER".

Pages 36, 37, 38, and 39 - change the columns for the series number from "30-50" to "31-50". For columns 28-30, create a field called "CARD NUMBER".

Page 44 - replace this page.

Page 49 - cross out "Blank or invalid data mask type" and the corresponding "X" in the "AS" column. Change "Entry requested to a terminated series" to "No entry to a terminated series" and erase the corresponding "X" in the "CS" column. Change the seventh line from the bottom of the page to "Entry type 4 cannot replace type 1".



Page 50 - replace this page with the new page 50.

Page 53 - in the "Asterisk" section, cross out the sentence "An asterisk before a data point on the printout from a data entry action indicates the entry made by this action".

Page 54 - in the "Data Bank Control" section, change "Data Bank Control" to "General Time Series Staff" and change the first sentence to "Located in DBS". To the last sentence in the "Delete" section, add "or of change the report frequency or series number of a series".

Page 55 - cross out the entire "Floating Point Characteristic" section. In the "Level of Security" section, in the sixth line from the bottom of the page, insert "secure," between the words "retrieve" and "confidential".

Page 56 - cross out "Mask Type.......See Section 7". In the "Matrix Number" section, change "Data Bank Control" to "General Time Series Staff". Also in that section, cross out the two sentences "Blocks are never allocated for future use" and "Leading zeros must be entered". Between the "Note" section and "Open File" section, put a note to indicate that the section entitled "Number of Decimal Places" is to be found on page 59.

Pages 58 and 59 - replace these pages.



# DOMINION BUREAU OF STATISTICS

National Accounts, Production and Productivity Division Current Business Indicators and Time Series Data Bank Section

# CANSIM: OPERATION MANUAL FOR DATA ENTRY

Published by Authority of The Minister of Trade and Commerce

December 1968 2204-504

Price: \$1.00



# ENTER DATA, OPERATION CODE (ED)

The CANSIM data entry program allows one data point per card. Information in columns 1-27 on this form is common to all data points; therefore, a new form must be used to enter data points for each different matrix number.

The Error Messages in Section 6 indicate the care with which the data entry form must be completed. Particular care is required in deciding the correct data entry code (col 67). There are 5 data entry codes as follows:

Code	Can replace	Can be replaced by codes
1 - Projection into future (appears on printouts with symbol "p").	Blank field, codes 1 or 5.	1, 2, or 3.
-Estimate of current figure (appears on printouts with symbol "e" until replaced by code 3).	Blank field, codes 1 or 5.	3
- Current figure	Blank field, codes 1, 2, or 5.	4
-Revision of current figure	Codes 3, 4 or 5. Never a blank field.	4
- Initial entry of data	Blank field.	1, 2, 3, or 4

# Card Format: Enter Data, Operation Code (ED)

Column number	Contents	Explanation
Auto duplicate		
All cards — Columns 1-27:		
1 - 4	TSDB	System Identification.
5 - 8	4 characters maximum, left justified.	Agency responsible for accuracy and security of data.
9-12	4 characters maximum, left justified.	Section of Agency responsible.
13 - 19	7 characters maximum, left justified.	Code Word. This is the Data Entry Security Word which was entered in the matrix header and is mandatory to permit access to this matrix.
20 - 21	ED	Operation Code.
22 - 27	6 digits, right justified	Matrix Number. Enter leading zeros.
Field varying from card to card		
8-30	001 - 999	Card numbers.
1-50	20 digits maximum, left justified.	Series number.



# Card Format: Enter Data, Operation Code (ED) - Concluded

Column number	Contents	Explanation
Fields varying from card to card - Conc.		
51 - 56	6 digits	Reference Date (yr. mo. dy)i.e.Feb.12,1968 = 68 02 12.
57 - 66	10 digits maximum, right justified.	Data. Do not enter decimals or leading zeros.
67	1, 2, 3, 4, or 5	Data Entry Code.
68	1, 2, 3, or blank	Security level of this data point. Ensure that the corresponding security word has been entered in the matrix header or the series header.
69-72	4 digits maximum or blank, left justified.	A data point may make reference to four footnotes. Enter here the specific footnotes in the matrix header which refer to this data point.
73	9 or blank	Blank-Checks that the per cent change from the last period in the base falls within the variance-allowed entered in the series header.
		9-Override i.e. no variance-allowed check is made.
74	C, D, or blank	C-To correct an erroneous entry made for data points, entry type, security or footnotes. If the field is left blank that field will not be changed, to blank security or footnotes, enter asterisks. Columns 1-56 must be complete and identical to that which is presently on base. Note that "C" in column 74 is to be used only to correct an entry made in error.
		D-To delete the entire "data point slot". Columns 1-56 must be complete and identical to that which is presently on base. To change reference date, first delete the data point slot and resubmit data with proper reference date. "D" required in column 74.
		Blank - Normal data action (any of the 5 data entry codes.) Columns 1-67 must be complete. In addition column 68 if data is secure and columns 69-72 if reference to footnotes required.
75-80	Blank	



			CAN	CANSIM DATA ENTRY	ENTRY							
AGENCY	DBS6	SECTION 2202					DATE	OCTOBER	OCTOBER 4, 1968		TIME 8:	8:45 AM
** ENTER DATA	DATA	MATRIX - 000007	. 000007									
CARD	SERIES	LAST PERIOD	THIS PERIOD	PERCT	DATE	E	TS	FINT	00	AR	ERROR	MESSAGE
001	1.1.1	8315	8201	1.4	680101	m	2					
002	1.1.2	176	173	1.1	680101	3	3					
003	1.1.3	1380	1120	18.8	680101	3	2					
004	1.1.4	-275	-192	30.1	680101	c	2		6			
900	1.1.5	1215	1124	7.4	101089	m	2					
900	1.1.6	124	56	54.8	680101	3	2	2	6			
007	1.1.7				671010							
800	1.1.7	820	972	18.5	671001	3	2			1		
600	1.1.7	972	691	28.9	680101	c	2		6			
010	1.1.8	-85	-33	61.1	670701	7	2		. 6			
011	1.1.8	-33	76-	184.8	671001				6	C		
012	1.1.8	76—		12.0	600101	C	C		,	)		



#### DATA MASK TYPE CODES

The following data mask type codes will be supplemented as required. Codes 00 through 99 are possible.

Code	Mask type	Sample of printout
01	zz,zzz,zz9.99	576.39
02	zzz,zzz,zz9.9	576.4
03	z,zzz,zzz,zz9	576
04	\$\$,\$\$\$,\$9.99	\$576.39
05	\$\$\$,\$\$\$,\$\$9.9	\$576.4
06	\$,\$\$\$,\$\$\$,\$\$9	\$576
07	,,-9,99	- 576.39
08	,,9.9	-576.4
09	- , , 9	-576
10	SS,SSS,SS9.99	+576.39 or -576.39
11	SSS,SSS,SS9.9	+ 576.4 or - 576.4
. 12	S,SSS,SSS,9	+ 576 or - 576

Note: In printouts leading zeros are suppressed to the left of the first significant digit or to the left of the figure to the left of the decimal point, i.e., 7.20



	GLOSSARY - Continued
Series	A sequence of data points arranged by time which are retrieved as a single unit together with the series header.
Series Header	The number and title of a time series. The header also contains all necessary information about the series such as the scalar factor, unit of measure, mask type, etc.
Series Number	An "open-ended" descriptor which allows for the identification of a series within a matrix. A maximum of 20 characters (digits and decimal points) is allowed for series identification, and must not exceed 9 levels (i.e. maximum of 8 decimals). Numbers are left justified in column numbers 31-50.
	Within a matrix, series are entered in a hierarchical structure. Series numbers designate the level of detail in the matrix and the position of the series within its level.
	For example:  01 exports and re-exports total  02 re-exports  (1.1)  02 domestic exports total  (1.2)  03 live animals total  (1.2.1)  03 food, feed, bev. and tob. total (1.2.2)  04 meat and meat preps  (1.2.2.1)  04 fish, fresh and frozen  (1.2.2.2)
	In the sample line 04 fish, fresh and frozen, the "04" shows the level of aggregation, the "(1.2.2.2)" the series and level indicator. The figure 1.2.2.2 is the series number and may be read as "the second 04 item under the second 03 level under the second 02 level under the first total".
	This structure makes possible one automatic machine check of the data base. After each action request is completed, crossfoot is performed (if requested in AM by a 1 in col. 52), by which each level is aggregated to the next highest level. Failure of the check results in an error message. There is an implication that the levels will be complete, i.e. contain all data. In some cases to perform crossfoot, it may be necessary to introduce dummy residual series (with a security code if desired).
Series Title	A fifty-character title for a series. Note that the title identifying the level need not be repeated for each series within the level.
	For example:  1. Expenditure on goods and services  1.1 Federal  1.2 Provincial  1.3 Municipal
	In the case of a matrix containing both seasonally adjusted (SA) and unadjusted (RAW), this information will appear in the matrix long title (See Long Title), and each series title will indicate (RAW) or (SA). Where units vary within a matrix, it may be possible to provide sufficient information in the matrix title or note; otherwise the units must appear in the series title.
Short Title	A forty-character title for a matrix, abbreviated from the long title.
Source	A fifty-character field describing the "source" of the data and used for publication purposes (name of publication, publication number, and agency).
Submission	A set of data and/or operations submitted at one time by the responsible agency for updating the data base.
Terminate	A series may be terminated and this prevents any further updating of the series but does not delete the series from the data base. Data may be retrieved from a terminated series.



#### GROSSARY - Concluded

Title	See Long or Short Title.
TSDB	System Identification (Time Series Data Bank), must appear on all data entry cards.
Update Time	Update time is the number of days after the last data entry when the next update can be expected. In future, CANSIM will list the overdue updates by Agency and Section codes.
Variance Allowed	Variance-allowed is the amount of variation expressed as a percentage between prior data and the data being entered. Variance is not checked when the data point being entered is an initial entry or a projection. Where a current data point (code 3) exceeds or is known to exceed the variance-allowed entered in the series header, it is possible to override this check by entering "9" in column 73 of the ED form. In establishing the variance-allowed for a series, one rule-of-thumb would be to expect rejection on 5% of data entries.

BY DELLE LIE

11 1 2 1 1 2 1 1

2000

907 0407

Drawler working

CAT 185327 CHAR

ACCO CARROLAR OFFICERY FIG.

